

### CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1 1. (Currently amended) A method for providing film grain information comprising the steps  
2 of:  
3 characterizing an input image information stream in accordance with the difference  
4 between the input image stream and a filtered input image stream to provide information  
5 indicative of film grain within the image stream, the film grain information including at least one  
6 parameter among a set of possible parameters specifying different attributes of the film grain in  
7 the image stream;  
8 encoding the film grain information for subsequent transmission.

1 2. (Previously presented) A method for providing film grain information comprising the  
2 steps of:  
3 characterizing an image information stream to provide information indicative of film  
4 grain within the image stream, the film grain information including at least one parameter among  
5 a set of possible parameters specifying different attributes of the film grain in the image stream;  
6 and  
7 encoding the film grain information for subsequent transmission;  
8 wherein the set of parameters includes a plurality of correlation parameters and a plurality  
9 of intensity-independent parameters.

1 3. (Original) The method according to claim 2 wherein at least one correlation  
2 parameter defines a spatial correlation in a perceived pattern of film grain.

1 4. (Original) The method according to claim 2 wherein at least one correlation  
2 parameter defines a correlation between color layers.

1 5. (Original) The method according to claim 2 wherein at least one correlation  
2 parameter defines a temporal correlation resulting from previous processing the image sequence.

1           6. (Original) The method according to claim 2 wherein at least one intensity-  
2 independent parameters defines an aspect ratio of the film grain.

1           7. (Original) The method according to claim 1 wherein at least one parameter defines  
2 intensity of a random component of the film grain.

1           8. (Original) The method according to claim 2 wherein at least one of the intensity-  
2 independent parameters defines a color space and blending mode operation used to merge the  
3 simulated film grain with the image.

1           9. (Original) The method according to claim 1 further comprising the step of  
2 transmitting the film grain information transmitted out-of band with respected to transmission of  
3 image representative information.

1           10. (Original) The method according to claim 1 further comprising the step of  
2 transmitting the film grain information transmitted in band with respected to transmission of  
3 image representative information.

1           11. (Original) The method in accordance with claim 2 where the set of parameters are  
2 computed in accordance with a second order auto regression representation of the spatial  
3 correlation and a first order regression representation of the cross-color and temporal  
4 correlations.

1           12. (Original) The method according to claim 3 wherein the at least one parameter  
2 describing the spatial correlation of the grain is established in accordance with a spatial  
3 convolution model.

1           13. (Original) The method according to claim 3 wherein the at least one parameter  
2 describing the spatial correlation of the grain is obtained from cut frequencies of a filter in the  
3 Fourier domain.

1 14 (Original) The method according to claim 1 wherein the encoding step comprises  
2 encoding the film grain information according to the ITU-T H.264 video coding standard.  
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1 15. (Currently amended) Apparatus for providing film grain, comprising:  
2 first means for characterizing an input image information stream in accordance with the  
3 difference between the input image stream and a filtered input image stream  
4 to provide information of film grain within the image stream, the information including at least  
5 one parameter among a set of possible parameters specifying different attributes of the film grain  
6 in the image stream;  
7 second means encoding the film grain information for subsequent transmission.  
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1 16. (Previously presented) Apparatus for providing film grain, comprising:  
2 first means for characterizing an image information stream to provide information of film  
3 grain within the image stream, the information including at least one parameter among a set of  
4 possible parameters specifying different attributes of the film grain in the image stream;  
5 second means encoding the film grain information for subsequent transmission; and  
6 wherein the set of parameters includes a plurality of correlation parameters and a plurality  
7 of intensity-independent parameters.

1 17. (Original) The apparatus according to claim 16 wherein at least one correlation  
2 parameter defines a spatial correlation in a perceived pattern of film grain.

1 18. (Original) The apparatus according to claim 16 wherein at least one correlation  
2 parameter defines a correlation between color layers.

1 19. (Original) The apparatus according to claim 16 wherein at least one correlation  
2 parameter defines a temporal correlation resulting from previous processing the image sequence.

1 20. (Original) The apparatus according to claim 16 wherein at least one intensity-  
2 independent parameters defines an aspect ratio of the film grain.

1           21. (Original) The apparatus according to claim 15 wherein at least one parameter defines  
2 intensity of a random component of the film grain.

1           22. (Original) The apparatus according to claim 16 wherein at least one of the intensity-  
2 independent parameters defines a color space and blending mode operation used to merge the  
3 simulated film grain with the image.

1           23. (Original) The apparatus in accordance with claim 16 wherein the first mean  
2 computes the set of parameters in accordance with a second order auto regression representation  
3 of the spatial correlation and a first order regression representation of the cross-color and  
4 temporal correlations.

1           24. (Original) The apparatus according to claim 17 wherein the at least one parameter  
2 describing the spatial correlation of the grain is established in accordance with a spatial  
3 convolution model.

1           25. (Original) The method according to claim 17 wherein the at least one parameter  
2 describing the spatial correlation of the grain is obtained from cut frequencies of a filter in the  
3 Fourier domain.

1           26. (Original) The apparatus according to claim 15 wherein second means encodes the  
2 film grain information according to the ITU-T H.264 video coding standard.